



NASA Explorer Schools News

*A monthly newsletter
from the teachers of
tomorrow's explorers*

With this issue, NES News begins its third year serving NASA Explorer Schools' teachers, students and families.

Featured Mission



Eyes on the Neighborhood
Near Earth Objects (NEOs) are comets and asteroids that are close to the Earth. So far, 3443 of these have been discovered. Most comets are made of ice and dust and are

formed in the outer parts of the solar system. Most asteroids are small rocky objects and were formed in the asteroid belt between Mars and Jupiter. Some NEOs have orbits that cross the path of Earth's orbit. The NEO Program looks for and tracks NEOs.

About 25 tons of fragments from NEOs enter Earth's atmosphere every day. These fragments are called meteoroids. A meteoroid that burns up in the atmosphere is called a meteor. One that reaches the ground is called a meteorite. It is important that scientists study nearby asteroids and comets. There is a very small chance that a large object may one day hit Earth. The NEO Program works to identify the possibility of danger from asteroids and comets. That way a plan can be made on how to deal with the object before it hits Earth.

Some scientists think that asteroids and comets played an important role in the formation of life on Earth. Life formed on Earth over 3.5 billion years ago. This is about the time when asteroids and comets stopped hitting the Earth over and over again. Asteroids and comets contained the carbon and water that life needed to develop on Earth. It could be that those ingredients came from the impact of a Near Earth Object.

<http://neo.jpl.nasa.gov>

Learn more through an interactive multimedia presentation at

<http://www.jpl.nasa.gov/multimedia/neo/index.html>

Bytes and Bits

NESN Puzzler

What is the name of NASA's first center and when was it established?

The first ten individual NES students to send the correct answer will win a NASA prize! Send us your name, your teacher's name and your school's name and address. Answer to last month's puzzler: Hubble Space Telescope.

NES Spotlight

Marvell Elementary & Marvell High School

Students: 600

Teaching Faculty: 60

Marvell Elementary and Marvell High School are next to each other in the small town of Marvell, Arkansas. They are right in the middle of fields of cotton, soybeans and rice. The school district is very small. This makes for strong relationships between the teachers and students. Marvell High School was founded in 1967. The new elementary school was finished a short time ago. The schools take part in "The Algebra Project," at the state level. It has a computer lab so students can learn more about math and literacy. The high school has graduated three Bill Gates Scholarship recipients in the past two years! Based on merit and need, these scholarship pay tuition and expenses for an entire college degree. This year students will be working for Space Camp Scholarships in their science classes. Marvell students really know how to reach for the stars!

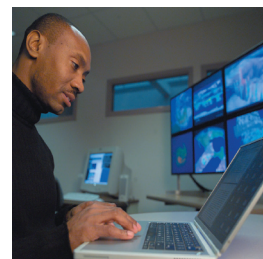
NASA Explorers are people like you

Name: J. Marshall Shepherd

Education: Ph.D. in Meteorology

Job Title: Deputy Project Scientist,
Global Precipitation Measurement
Mission and Research Meteorologist

Marshall Shepherd works at NASA's Goddard Space Flight Center. He is a meteorologist. He is a scientist who studies the atmosphere. Marshall helps NASA come up with new ideas. One of his projects is to look into the effect cities can have on our weather. He often appears on television, web casts and radio to explain climate and weather issues. Marshall says, "Sometimes, I have to pinch myself because I can't believe that I am a scientist for NASA." When he was young, Marshall wanted to study insects. He changed his plans when he found out he was allergic to bee stings. In a 6th grade science class, a project called "Can a Sixth Grader Predict the Weather?" inspired his current career. Marshall co-authored a children's book about weather prediction with Fred Bortz, called *Dr. Fred's Weather Watch: Create And Run Your Own Weather Station*. Outside of work, Marshall likes to spend time with his wife and daughter. He also likes to workout, listen to music, play sports and play Scrabble.



National Aeronautics and
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<http://learners.gsfc.nasa.gov/NESNews>

Please send comments or questions to NESNews@nasa.gov